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AMERICAN VETERINARY REVIEW,

OCTOBER, 1885.

EDITORIAL.

"AMERICAN VETERINARY REVIEW" PRIZE.

After listening to the usual report of the Committee on Prizes at the last meeting of the United States Veterinary Medical Association—"no paper; no prize; no report"—the editor of the REVIEW addressed the meeting in a strain which proved very interesting to his audience, and will, no doubt, lead to results not a little interesting in the future to some certain parties at present unknown.

The speaker announced his intention to add to the prize already established by the association, another, to consist of a gold medal of the value of fifty dollars, for the ablest essay or paper on any subject connected with veterinary medicine, and that at the next annual meeting the members will be invited to determine by ballot the authorship of the successful paper. The vote will not, in any respect, be one of personal preference, the authorship continuing unknown until after the decision has been reached. *Each essay will be sent to the editor and published in the REVIEW; will be identified by a motto selected by the author, and the author's name will be inscribed on a card which is to be enclosed in a sealed envelope, on the outside of which the motto will appear in duplicate, the name thus waiting to be revealed until the irrevocable decision has been reached.*

In the hope that the association would kindly accept the offer, the REVIEW would suggest, also, that the competition be not restricted to members of the association, but be extended to *every member of the profession*, in and out of the association, subscriber or non-subscriber of the REVIEW.

It is with gratified pride that we call the attention of our readers to the kindness of the association in promptly accepting our offer. Let it be understood—and we wish that our motives may be truly appreciated—that in taking this step we have no other intention than to encourage our younger members of the profession, and to stimulate their energy and develop their resources in a field of labor perhaps too little cultivated by them, while, at the same time, we offer them an opportunity to win a prize whose value will not be lessened or ignored when it will be remembered that it is not a *gift* from a party of partial friends, but the reward and result of patient and successful labor in their chosen calling, adjudged to have been fairly won by the suffrages of a body of men who represent a majority of the approved and established veterinary practitioners of the country.

THE UNITED STATES VETERINARY MEDICAL ASSOCIATION.

The twenty-third anniversary meeting of this body of veterinarians was held at the American Veterinary College building, pursuant to notice given in our last issue. Whether it was a great success may be a question difficult to answer. It is true the attendance was quite large; that a number of delegates from various State societies were present; that a good many new members were admitted; and that a very harmonious and friendly feeling prevailed throughout the day and until late in the evening. But after all this has been said this meeting, held on the 15th of September, 1885, was just like preceding meetings. A great deal of valuable time was spent in comparatively unimportant discussions and trivial items of business, and there was a want of reports from the various committees, which must be charged to a lack of interest, or to the neglect in the performance of the duties of those who had charge of them. Some

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brief interesting remarks were made on the histology of the lesions of various pneumonias, and there was a very beautiful exhibition of microscopical objects, and of pathological specimens, etc. Some few needful matters of business, with these, constituted the entire work of the whole day's session.

INTERNATIONAL MEDICAL CONGRESS.

Probably few of our veterinarians are aware of the trouble which exists in relation to the International Medical Congress which our friends of the sister profession have been discussing for some months back. And probably, also, our medical brethren care but little whether we veterinarians take any interest in the matter or not. Still, we are bound to do it, and why? Not because we attach importance to its selection of a place of meeting, whether in this city or another; whether in this State or in that one, but for simply this reason: What will the Congress do with the veterinarians who are likely to be present either directly as members or as delegates? We know positively that Europe is to be well represented. By personal and private information we have learned that French and English, and perhaps German veterinarians are to be present. Will they be admitted? To us American veterinarians admission has been refused in medical societies, at least as members, on the ground that we were "veterinary," and not "human," practitioners. Shall our European confreres be ignored on this ground, or shall they be received? If to be ignored, they ought to know it at once, if for nothing else to save the trouble and expense of a trip across the ocean. If they are to be recognized, what of veterinarians on this side of the ocean?

This seems to be a difficulty upon which we would like to have some light. In either case our European friends will, no doubt, receive from us a good and deserving welcome; but is our recognition by our medical brethren, and our admission to their societies and congresses, to be forced upon them by the friendly visits of delegates from Europe belonging to the veterinary profession? "To be or not to be," that is the question.

NEW EMPIRIC NURSERIES.

A new era seems to have dawned in the history of American veterinary science, or, probably, not entirely a new era, but rather a new "boom" seems to have started in the establishment of veterinary departments in universities and agricultural colleges. Not less than three new chairs of veterinary science have recently been established in Ohio, Missouri, and Michigan.

While we shall always be glad to see any new ideas inaugurated which seem likely to promote the advancement of veterinary science, we fear that the creation of the professorship of veterinary science is now too much on the increase, and that, instead of doing a good work, the result of these appointments will mean the revival of an element which all lovers of the profession have been trying to put down, and that is—*quackery*.

Our American people are prompt to believe that they can learn everything and do it in shorter time than any other people in the world, and this is emphatically the case when it relates to veterinary medicine or the care of our animals. Where is the dean of any of our veterinary colleges who has not received many letters from parties who "*knew it all, and merely wanted to polish off and get a diploma in the shortest time possible.*" What, then, is likely to be the result of this half-and-half veterinary education? We regret that in the newly appointed departments the names of such good men as those given should have lent themselves to encourage such an error. One man appointed to fill up all the departments of veterinary medicine, commits, we believe, a great wrong to himself and to his profession. It is not our desire to say that agricultural colleges or universities ought not to have veterinary departments attached to their curriculum. Far from us be such an idea, for there are in our profession many links uniting us to the agricultural interest, and those links the veterinarian alone is able to teach them. But this is all the professor of veterinary science of an agricultural school ought to do. If he goes beyond that, if he intends to give a *thorough veterinary* education by himself alone, he certainly undertakes a labor that no one man is able to perform.

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SANITARY MEASURES.

The fight against the invasion of contagious diseases is slowly organizing in the West. The enactment of laws by some of the Western States and Territories, with the appointment of official State and Territorial veterinarians, illustrate the importance that is attached by the people to the protection of their domestic animals from animal scourges. The proclamations and the rules and regulations lately issued in Illinois and Wyoming, and which we publish to-day, will be found interesting reading, showing, as they do, the importance which is attached to that very first step in sanitary medicine, viz., the "declaration." Probably it was not very necessary to have this brought to the attention of the State veterinarian and his assistants by a set of rules established through a Live Stock Commission, as the veterinarian ought fully to appreciate and know that this is his first duty to the people of the State. But, after all, in our land, and so long as this sanitary service is in its infancy, it is better that the imposition of this declaration should be enforced, if only to brace up the courage of those who may from personal feeling be induced to neglect it. But there is also another important step in this action; it is making it obligatory upon the owners of animals to comply with the laws, and to give the veterinarian all the opportunities he needs in order to make his investigation successfully useful.

With the new action which is to be taken against pleuro-pneumonia must be considered that of the cattlemen of Kentucky, who propose to raise money and establish a fund with which all affected and contaminated animals are to be bought to be destroyed. If this action is effectively carried out and followed up by the proper vigilance against possible new outbreaks or new importations, this single-handed action of Kentucky may prove satisfactory, just as, years ago, it proved to be in Massachusetts. And so long as the General Government at Washington seems to be willing to limit its action merely to investigations and nothing else, the action of the State of Kentucky is to be commended as a good precedent, and probably the only mode by which she can protect and save her live stock. This is not, however, sufficient.

The liberality with which this fund is going to be subscribed, as it seems at least, calls for a *sure, certain* and *proper* use of the money subscribed; and it is to be hoped that the examination of the stock will be committed to the hands of an educated veterinarian, *thoroughly acquainted with the diseases*, and a *good diagnostician*, whether he be already an official inspector or not.

As we go to press, however, the following information reaches us:

"The Kentucky stockmen have failed in their efforts to raise a fund to buy and kill cattle exposed to pleuro-pneumonia, only \$3,000 of the desired \$9,000 having been subscribed."—*National Live Stock Journal*.

ARMY VETERINARIANS.

At the meeting of the United States Veterinary Medical Association a petition was read, which, it was understood, was to be presented to the Adjutant-General in Washington, which laid before him the peculiar position of the army veterinary surgeon, and called his attention to the right they claim of better professional recognition, and suggested the propriety of organizing a special army veterinary department.

These changes which are asked for by our army colleagues have been already insisted upon by us on several occasions, and our readers will remember the series of articles which we published several years ago on this subject.

We were asked to present the petition to the association, and to ask their assistance. We are now pleased to inform our brethren in the army that the subject has received the full sanction of the meeting, and that a committee will be appointed to communicate with the proper authorities upon the subject.

PHILADELPHIA VETERINARY SCHOOL AND HOSPITAL.

It is with pleasure that we notice the second step of the University of Pennsylvania towards establishing a veterinary school or department. The news comes to us, *only through an exchange* (we regret to say), that the new buildings were opened on the 1st

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of September. Those consist of a stable, or hospital, where forty patients may be accommodated. With the facilities it already possesses, with the capital it has in its treasury and with the unequalled name at its back of the University of Pennsylvania, we can predict, and most sincerely wish, for the new school all the success it deserves.

ORIGINAL ARTICLES.

DISEASES OF THE HEART IN DOMESTIC ANIMALS, ESPECIALLY THE HORSE.

BY FR. BLAZEKOVIC.

(Translated by J. C. Meyer, Sr., V.S.)

Continued from page 213.

II. ÆTIOLOGY OF HEART DISEASE.

Diseases of the heart occur more frequently among domestic animals than has been generally supposed. The comparatively difficult diagnosis of the diseases of the heart causes such to be overlooked during life, and often confounded with lung diseases. The earlier schools, which were not acquainted with the methods of physical examination, transgressed particularly in this respect, and, therefore, could not become familiar with the diseases of the heart. But if heart diseases be more frequent than has been heretofore known, it may be assumed that also the causes which give rise to such diseases often has an effect upon the organism. Domestic animals which are compelled to work are specially subjected to these affections. The greatest number of heart diseases is noticed among horses and draft cattle; the smallest among sheep and swine. Canines, however, show a particular disposition to heart disease.

Roell asserts correctly that very little is known about the development of the available movements and the setting in of the principal active causes. Nevertheless, after close examination of the interior as well as the exterior active movements of the organism which chiefly influence the circulation and action of the heart,

sufficient fulcrums can be found enabling us to explain the development of such affections.

Following up such movements, we shall in the first place come to the conclusion that the mechanism of the heart itself can deviate from the normal in different ways. In literature not a few such cases are known, and how much more frequent are those which occur in practice and are not published. This is also true of the innate anomalies at the origin and the division of the vessels. Such deviations from the normal are as a result a positive embryo of chronic heart disease. According to the numerous examinations of Prof. M. Goubaux, of Alfort, anomalies are not at all rare in the division of the carotids.

The innate abnormalities of single parts of the heart and valves are genetic for the observation of heart diseases. Another matter of consequence is, that certain species of animals have a greater disposition to heart disease than others. Its frequency among dogs needs only to be remembered. Besides, it is a fact that thoroughbreds suffer more frequently with heart diseases than those of the common type. This may depend upon the manner of use made of such animals, for the excessive, especially the too violent and forcible, action of the heart must be the cause of the disease in thoroughbreds. Heart affections will be oftener noticed among noble breeds and trotters than among draught horses. Especially is it true of such half-breeds, which do not possess the qualities of thoroughbreds, and of which the performances of the latter are irrationally demanded. In a hundred cases of pulmonary emphysema forty per cent. is undoubtedly caused by affections of the heart. Great exertion often produces inflammation and rupture of the heart.

The influence of the nervous system, which is of vast importance for the generation of heart diseases in human beings, must not be overlooked in animals. Such a case has come under my observation. The stallion "Vöreze" fell down dead during the act of copulation. The post-mortem examination disclosed a rupture of the heart. According to my observation, male animals are more susceptible to heart disease than females. Moreover, draught horses suffer oftener with heart affections than brood

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mares. I have even found that established defects of the valves improved after two years life of breeding; while the brood mare as a draught horse would surely have died. Among young horses which are being trained and broken, heart diseases occur proportionally more frequently than among older horses which have been in service. Nervously excited, timid animals have a particular predisposition to the disease.

Heart diseases are also often directly or indirectly caused and determined by previons or still existing changes of other organs. Such pathological changes of other organs, which only exist in consequence of heart affections, are not to be confounded with the above named. Often the most efficient diagnosticians consider such changes the cause, whilst they are merely the results of heart diseases; but in many cases a definite limit between cause and effect is not possible

Affections of the heart are occasioned by the lateral pressure of the neighboring parts, by aggravated circulation, in the calling forth of the more violent heart affections, by swellings in the abdominal and thoracic cavities, by new formations from without or within. Here the influence of the aneurismatic pouches at the pulmonary artery and other vessels deserves particular attention. Changes and degeneration in the spleen and liver exercise a pressure upon the vessels of these organs, and consequently generate disturbances of the heart and circulation. The coagulation in the vessels is important for the ætiology of heart diseases; for as soon as the coagulation exists in greater dimensions disturbances in the circulation arise, which, after continuance, have, as a result, chronic heart disease.

Mechanical influences from without, such as too tight buckling on of the harness, a strong pressure of the girdle, exaggerated checking of young training horses, frequently produces sudden heart affections, and if the causes continue they become plastic. The effort a young horse in training makes to free himself from the harness which embraces his body, is often amazing. And the irrational trainer considers these exertions due to ill-temper, while they are nothing more than an impulse of self-preservation on the part of the animal, which, breathing heavily and

anxiously, is disturbed in his whole circulation, and is on the verge of fainting and rupturing vessels. If the heart beats of such an animal be examined, its action would be startling. How many a good horse has fallen a victim to such irrational training!

The course of constitutional diseases and epizootics have partly incidental and partly characteristic heart diseases as a result. These are either by means of some toxical influence, or without it, the cause of heart diseases, which take a conspicuous part in *casus-morbi*, or after recovering from primary ailments more or less important forms of affection remain, which reduces the animal into a chronic decline.

Such cases, especially as accompanying symptoms of anthrax, hemorrhage, typhus, influenza, hæmorrhagic diathesis, pyæmia, hæmoglobinuria, etc., are known to every practitioner. Occasionally in inflammation of lungs, diaphragm and intestines, heart affections can be noticed.

The influence of dynamical powers, such as currents of air, atmospheric pressure, sudden changes of temperature, wind, rain, heat, etc., in short all those influences which produce diseases caused by taking cold, are not to be undervalued in the development of heart affections.

The heart is, furthermore, exposed to manifold mechanical insults, trauma, and injuries from without. Sufficient cases in literature are known wherein wounding of the heart and pericardium from without were caused by foreign bodies from the stomach, such as swallowed nails, needles, and metallic pieces. Frequently concussions and direct injuries of the heart are produced by pressure, shocks and collisions.

The influence of temperature, not so much upon the generation as upon the intensity and abatement of already existing heart affection, is generally known; however, I will return to this at another place. The examination of the different parts of the organs of the heart is absolutely necessary for the development of the genesis of heart disease. Every part of such organ is exposed to these affections according to the significance of its tissue for the organism which predisposes it for the reception of particular causes. Derangement of single parts of the heart is

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very often followed by disorder of other parts, and therewith acts directly as a predisposing and exciting cause. For instance, the acute affections of the endocardium pass over to the pericardium, and the reverse. Diseased condition of the serous membranes have likewise changes of the muscles to fleshy parts of the heart as a result. Infiltrations and curvatures of the valves of the heart produce an enlargement of the cavity, incrassation or attenuations of the walls of the heart, etc.

According to the age of the animal, nothing can be inferred with certainty. At all ages heart affections can occur; still, these affections, according to my observations, as before mentioned, seem to occur more frequently among young animals than among older ones. Forage and attendance have great influence upon the origin of heart disease; especially is this true of the nobler breeds and stock which are kept in good condition. Fatty degeneration, new formation of fatty tissue already in the normal state, will, while an animal is subjected to great exertion, or in the beginning of training, especially if it is forced, give rise to disturbances in the heart functions, which, if they continue, develop into acute or chronic diseases.

(To be continued.)

INFLUENZA AND THE INFECTIOUS DISEASES OF THE HORSE.

By PROF. DIECKERHOFF.

Though immense progress has undoubtedly been made within the last three years in the differential diagnosis of the various contagious diseases of the horse, which have been grouped for a century past in veterinary medicine under the general designation of influenza, our knowledge of the specific nature of each is still incomplete, and it cannot be perfected until we shall have enjoyed the benefit of new and more exact observations. We shall probably be obliged to wait very long for the discovery of the various micro-organisms by which they are generated, and the consequent preparation of successive cultures of the appropriate microbes. The inoculation of healthy horses by these will then easily determine the varieties of the disease or diseases in

question. This point has not yet been reached, and until it has been realized by our zealous experimentalists, we must continue to depend upon the process of clinical observations for additions to our intelligence.

Prof. Dieckerhoff says: "influenza" ought not to be used to designate one single disease of the horse, because its signification would then be too limited, and its restriction alone would convict many practitioners of error, who to-day are in the habit of giving that name to a series of infectious diseases. Friedberger and Siedamgrotski propose to designate under the name of influenza, the pferdestaupe (benign typhoid fever.) Friedberger again, calls "influenza pneumonia"—the pferdestaupe complicated with pneumonia; an excessively rare occurrence; while Lustig reserves the same names (influenza-pneumonia) to a form of brustsenche, (typhoid fever complicated with serious diseases of the chest.)

These vague expressions give rise to the greatest confusion and should be utterly abolished, together with another proposition of Dieckerhoff, who in past days proposed to reserve the word influenza for all infectious diseases of the horse, adding for each variety the proper specific and distinguishing term. In the general interest of science, in order to conciliate the opinions of all, it becomes necessary to distinguish these affections, in the study of the causes and symptoms special to each. The word influenza will therefore be considered merely in a sense historical and general, and will apply to all the infectious diseases of the horse. Each one, however, will receive a special name. And, moreover, we shall never apply the term to affections of the epizootic and enzootic character.

CROUPAL OR FIBRINOUS PNEUMONIA OF THE HORSE, COMPARED TO BRUSTSEUCHE.

Typhoid fever complicated with severe pneumonia.—In the group of diseases called "influenza," must first be classed two principal ones, pferdestaupe and brustsenche, whose course and differential symptoms are at the present time quite well known. If some practitioners do not agree upon the diagnosis of these two affections, it must be remembered that in medicine even the

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theories which seem most clearly defined and plausible, always present more or less obscure and debatable points.

Brustsenche seems to have some analogy with the croupal pneumonia of the human subject. On this point Furgensen says: "The portion of the pleura corresponding to the inflamed segment of the lung is always altered. The injection of the blood vessels is first discovered in small sub-pleural ecchymoses; the serous surface becoming the seat of the trouble, thickening and becoming covered with false membranes, while effusion takes place in the chest. Thus, first localized in the pulmonary pleura, the inflammation spreads subsequently to the costal."

Fraentzel adds: "The fibrinous pneumonia of man is always accompanied with pleurisy, even when the lesions of the lungs do not come in contact with the pleura, and these are ordinarily more affected in the costal than in the pulmonary region."

The result is that pneumonia is often only secondary, while pleurisy is the principal disease and may lead to death. The same observations may be made in Brustsenche and in one of the other diseases. It must be acknowledged that the same causes, viz.: the same infectious germs, may give rise to both the pulmonary and costal lesions.

The etiology of acute diseases, with a typical and regular course, of the organs contained in the chest is yet quite obscure. Siedamgrotsky has described:

1st. Croupal pneumonia (lobar); 2d. Pleuresy (rheumatismal); 3d. Pleuro-pneumonia (infectious pneumonia); 4th. Brustsenche, or contagious pleuro-pneumonia.

This classification is based either upon the seat, the extent of the inflammatory groups of the diseased organs, or the degree of contagiousness of the affections. Without ignoring the practical importance it may possess from the point of view of the diagnosis of Brustsenche, it must be acknowledged that it is difficult to discern the difference that exists between the four divisions.

The pneumonia that Siedamgrotsky and Roell have named *croupal* is not a sporadic disease affecting horses after exposure. It is, on the contrary, an infectious disease, with a typical and regular course, transmissible from one to all the occupants of a

stable, without reference to the originating cause from which it sprung. For twenty-five years prior to 1884 Dickerhoff had observed that the disease prevailed principally in cold and stormy weather, and that within the space of two weeks it made its appearance in a large number of stables, more or less populated, of the town or suburbs of Berlin. In none of those epizootics has the origin of the infectious germ ever been discovered. The same disease often exists in other countries under the influence of north and east winds, in the stables of horse dealers, but the infection has in all cases been traced to other localities from which it had been conveyed.

Pleurisy (rheumatismal) of Siedamgrotsky is also, according to that author, produced by exposure, and principally upon young horses which have traveled in rail cars. This form of pleurisy seems to differ from that which is found in the post-mortem of horses which have died from *brustseuche* towards the tenth day. At this period of the disease there are no further traces of pneumonia, the only lesions being those of simple or double pleurisy.

Pleuro pneumonia (infectious pneumonia) of Siedamgrotsky includes several affections of the essential organs of respiration, and is due to various causes, such as foul stable, miasmas, etc.

The word *Brustseuche* seems well selected as a designation of contagious pleuro-pneumonia in the horse, since it specifies the inflammatory group of the lung as that of the pleura. It applies also to croupal pneumonia, though Friedberger seems ready to recognize in it a peculiar character and a special contagiousness. But, from the symptoms and lesions sometimes described, it seems but just to believe that he has not always met with the true croupal pneumonia. The contagion of *brustseuche* may take place directly from the sick to the healthy, and the infectious germ may retain its virulency for a longer or shorter period outside of the organism. Still it is not rare to see healthy animals continue to be located with diseased subjects without being contaminated. This anomaly is well known in pathology.

But though it must be admitted that croupal pneumonia is contagious only in peculiar instances, it must be conceded, nevertheless, that the contagiousness does exist. Distemper (*gourmes*)

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often follows exposure to cold, upon a first subject, and then by contagion extends to a portion or to all the animals of the same stable. The case is similar with brustseuche and croupal pneumonia. In aiming to establish the similarity of these two last named diseases, Dickerhoff and Dr. Mendelsohn preserved the serosity from the lungs of six horses which had died with brustseuche, and in two they found micrococci similar to those which had been found in the lungs of a man who had died with croupal pneumonia (de infectiose natur der pneum. Zeitsch. fur Klin. Med. vii.). Both of these subjects had been suffering with simple pneumonia and dry pleurisy.

Brustseuche may assume the form of pneumonia, of pleurisy, or of pleuro-pneumonia, and under each form may last for a period averaging from seven to eight days—a period during which the virulency has become more or less established. But this is a specification which is without practical importance, inasmuch as it cannot be accurately determined until after death.

Brustseuche seems to have some analogy with bovine pleuro-pneumonia, similar microscopic lesions being often found in both diseases; and as each may present itself as pneumonia, resembling croupal pneumonia, and as exudative pleurisy. These two forms of peripneumonia had already been observed, and it was then held that an animal might contract either dry or moist peripneumonia, according to the dryness or the moisture of the food he might have eaten.

In these two diseases, again, hemorrhagic imfractuses are found in the lung, whose conditions varies both with individuals and species. For instance, in the horse, whose tissues are generally finer and more easily decomposed, these small infractus soon become so many purulent centres.

To resume, all the conditions referred to seem to establish that there is a strong analogy of brustseuche and peripneumonia. Each may assume the form of pneumonia (croupal) and of pleuro-pneumonia—two new diseases which, though different, from an anatomical point of view, yet owe their origin to the same infectious germs.

(To be continued.)

REPORTS TO THE COMMITTEE ON DISEASES OF THE UNITED STATES VETERINARY MEDICAL ASSOCIATION.

By JAMES D. HOPKINS, D.V.S., Territorial Veterinarian, J. C. MEYER, Jr., M.D., D.V.S., Cincinnati, Ohio, and B. McINNES, Jr., V.S., Charleston, S.C.

DEAR SIR.—Your letter of the 10th is at hand. I sincerely regret that official duties prevent my attendance at the annual meeting of the Association. Therefore you will do me the favor to express my best wishes to the members present. Also my appreciation of the objects of the Association, and the hope that every gentleman present may be benefited by the intelligent discussion of the many diseases which afflict our domestic animals.

This subject has proved a very interesting one, and occupied a prominent place in the discussions of agricultural and stock-growing circles throughout the country. The application of sanitary science, as applied to the prevention of disease among domestic animals, has made an immense advance in this country within the last five years; and this advance is due to the spread among the people of sound scientific knowledge of disease and the means of its prevention, through the untiring efforts of those gentlemen who, years ago, established, in the face of much opposition and discouragement, veterinary colleges, where it was made possible for worthy youths to obtain a thorough training in this branch of medical science.

These young men, trained in sanitary science, have located in different parts of our country. At first they met with great difficulty in overcoming the prejudices and preconceived notions of stock-growers as to the different ailments afflicting domestic animals. They have also met the opposition of the ignorant charlatans, who, having assumed the title of veterinary surgeon, preyed on a credulous public, and by their utter disregard of respectability and integrity, brought the honorable title they had appropriated into contempt.

The spread of contagious pleuro-pneumonia among the cattle of the Western States during the past two years, and Texas fever last year, has shown to the people the necessity of sanitary laws

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for their prevention, and the demands of the people have been met by the Legislatures of many States enacting sanitary laws creating veterinary bureaus, with competent veterinarians in charge, with full authority for the investigation and control of all outbreaks of disease among the domestic animals, and to give to the people a practical knowledge necessary to cure or prevention.

The grave danger to the stock-growing industry from an invasion of contagious pleuro-pneumonia was presented to Congress at its last session and resulted in the passage of an act creating the "Bureau of Animal Industry." The functions of this bureau are to investigate and collect statistics as to the number of cattle in the United States, the manner in which they are handled (whether on farms or ranges), number of beeves marketed annually, cost of transportation from different points; diseases, the manner of their spread, mortality, etc., all of which will be laid before the next Congress for suitable legislation.

The printed reports of this bureau have been of great benefit to the whole industry, by giving to them official information of infected localities, thereby enabling the buyer to make his purchases with confidence in places not infected.

My opinion is, and the proof is abundant, that State sanitary laws are a necessity to the welfare of a State, and fully competent to stamp out contagion or prevent its entrance when properly enforced; *and while the state, county, or municipal laws are in force Congress cannot enact any law giving a federal officer authority to enter any person's barn-yard, or to examine his stock, or, in the event of contagious disease, to stamp it out by slaughter or quarantine of the cattle.*

During the past three years I have resided in Wyoming Territory, and I have been called on to examine into many outbursts of disease among cattle. Formerly all cattle were branded and turned loose on the range. Owing to the wide extent of this country, these cattle were seen only at the annual "round-up." No sick ones were noticed; but now many men of small means have fenced a few sections of land and attempted to raise cattle. The nucleus of their stock is imported from the States, where they

have been bred to shelter and hay-stacks. These cattle are turned into the enclosed ranches, with no other shelter than wire fence and partially fed on hay or left to "rustle." In this country there is forty degrees difference between noon and midnight in summer. In consequence of these hardships, many outbreaks of disease developed, and were it not for the investigation of the sanitary authorities the industry would have been ruined by the rumors of mortality among such cattle. I am glad to say that the people begin to properly appreciate the necessity of more intelligent management in this matter.

The diseases most common in this class of cattle are pneumonia, pleurisy, hydro-thorax, enteritis, tuberculosis and abortion. Among horses glanders prevails. During the past year I have condemned and had destroyed under the laws 62 horses and mules.

Black-leg in calves and braxy in sheep was the cause of considerable mortality two years ago. But more judicious feeding and care has checked the disease. Two outbreaks of verminous bronchitis occurred last year, due to the importation of calves from Iowa; a proper quarantine of the pastures prevented its recurrence. Owing to the great extent of this territory, I am unable to give statistics as to the numbers affected or the mortality, as I seldom make over one visit to a locality, and the owners rarely know of their own losses.

Last year, through the importation of cattle from Texas by railroad into Nebraska and Colorado, over 5,000 native cattle on the range died of Texas fever. Hog cholera invaded the eastern part of Nebraska last August (1884), and over \$1,000,000 worth of swine died. As many of the farmers of that region depended on their swine crop to meet outstanding engagements, its failure has caused much financial distress.

During the past spring and summer I have been engaged in the maintenance of a rigid quarantine against cattle imported from the Western States into this Territory. Cattle from east of the Missouri river, to enter this Territory without quarantine, must present proof of having been held four months on one farm, and that no cattle had been added to the herd during that period, and that no contagious disease has existed in the herd or vicinity.

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There is no doubt but that the quarantine regulations of the different States and Territories interfere with the cattle trade. But the great plains teeming with cattle must be protected.

It is to be hoped that before another season comes the sanitary authorities of the different States will meet and settle upon regulations, just to all, that will protect the whole industry from contagion, with the least disturbance to traffic. And I would most respectfully suggest that a committee of this Association should be appointed to represent this Association at such meeting of sanitary officers. Also to lay before Congress and the different State Legislatures the best manner in which to suppress contagious pleuro-pneumonia, Texas fever and hog cholera.

It is proper that at this time this Association should take an active part in shaping legislation for the control of contagious diseases of domestic animals; and that this Association should show to the world that it is entitled to the recognition it deserves for its learning and ability. I know that men educated in the same school will sometimes differ on the same intricate question, as in law or theology; but in the matter of contagion—how to stamp it out, or control it—among veterinarians, I cannot imagine but, that on discussion of the subject, all will agree as to the measures to be adopted. Therefore, I think that a committee from this Association would be able to accomplish much good for the *profession*, instead of allowing a few veterinarians to represent *themselves* in legislative halls to the detriment of the whole craft.

Respectfully submitted,

JAS. D. HOPKINS.

In compliance with your request, I beg to submit the following report on disease:

Since our last annual meeting my attention has been chiefly directed to the unusual frequency of glanders, anthrax and influenza, having an appearance of contagiousness.

Glanders was very conspicuous during the course of the past twelve months, and if measures be not immediately taken to exterminate the disease, it will be difficult to eradicate it.

The State of Ohio has a law prohibiting the sale of animals so diseased. It makes the owner of such an animal liable for all damages that might arise by the diseased animal coming in contact with the healthy horses. This is the extent of the law, but it does not prevent the spread of the disease. As long as the law does not make it a criminal offense for a man to own a glandered horse, and does not give the veterinarian power to destroy the diseased animal, and at the same time afford him the necessary protection, it will be impossible to arrest its progress.

During the year, the following cases of glanders have come under my observation :

1884. September, 1; October, 2.

1885. February, 2; May, 3; June, 1; July, 8—(5 Shetland ponies, 2 colts, 1 mule;) August, 9—(8 in one stable, 1 in another.)

With the exception of three, all of these cases were destroyed.

I have examined a number of suspicious cases, and look forward to an important outbreak sooner or later. I have heard of numerous cases of glanders about the State, and would recommend strict measures to prevent its spread.

Anthrax has come under my observation but once during the past year, and that was last October. The disease made its appearance on a place formerly occupied by a cattle dealer. Twelve head of cattle out of twenty, and three horses, died of the disease.

Influenza has played an important role during the spring months of 1885. Important from the fact that the death rate was greater than any other year. I should judge it was about 15 per cent., and the convalescent cases made a *slow* recovery. The fatal cases usually died of a bowel complication, attended by diarrhœa, followed by paralysis of the bowels, preventing the evacuation of their contents. This state usually set in after the acute febrile state had subsided. If the eyes had been closed and weeping, they now assume a dry and staring appearance. Debility is extreme; appetite is absolutely suspended; they drink water sparingly; restlessness prevails; pulse from 60–100 per minute; temperature, which at the outset was high, 105°–106°,

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is now 102° – 103° ; from the long continued abstinence from food the breath becomes foetid; the mucous membrane of the mouth looks bluish, and in some cases peels off; a dripping of water from the nose and the mouth is constant; the desire to continually rinse the mouth in water is very great.

Having mentioned the most striking symptoms of an aggravated case, I shall proceed to give the most important post-mortem lesions found. The chief alterations are found in the intestinal canal; a general inflamed state is apparent, and the lining membrane of the alimentary canal presents a bluish aspect. The canal is filled with fluid, in which floats a small quantity of solid excrement. I will state here that the lack of discharge from the bowels was not due to constipation, but to a want of activity of the bowels. This phenomenon must be carefully considered in the treatment of these cases. The thoracic cavity is in a fair state; lungs healthy; heart, pericardium filled with serum; ecchymosis of the endocardium is very striking; all other organs healthy. This form of influenza is unquestionably contagious, among green horses in particular, and among those horses that have not had that form of influenza commonly known as pink-eye on some former occasion. I have, however, been able to confine the disease to comparatively few by isolating the sick ones and by cautioning my patrons not to buy green horses, especially at auction stables, where the disease raged to an alarming extent.

Treatment.—Quinine was the chief remedy employed, given in large doses. Opiates were administered where bowel complications appeared.

Osteo porosis, with its rheumatic attendant, has been quite prevalent during the winter and spring months. It caused the destruction of a number of horses in this vicinity. This disease, however, is not contagious, and is produced by some local cause, which I am unable to point out just yet.

Besides these four diseases, none other than those which we would naturally expect to meet with during the respective seasons, has manifested itself.

Yours respectfully,

J. C. MEYER, Jr.

GENTLEMEN.—During the past year no epizootic nor enzootic attacks of disease have appeared in this city or the near surrounding except that of canine distemper, which commenced here about the early part of summer and has been very fatal. One of the most notable features about the disease was the almost entire absence of cough. The other symptoms of profuse catarrh from nose and eyes, impaired appetite and labored breathing, were always present. Cases when brought for treatment as soon as discovered sick were convalescent in about ten days; those brought after the disease had gone on for some days I could not relieve, the case usually ending in cerebro-spinal meningitis; this first appearing by a slight weakness in the hind legs, gradually moving up towards the fore limbs. Then the dog would lie down, unable to rise. Next I noticed the head paralyzed. In this condition they would lie for several days, giving expression to pain by a continuous whine, which was kept up until death. The difference I noticed between this termination and chorea was the entire absence of the twitching of the muscles. I tried setons in back of head, stimulative embrocations to spine, also cold water douches to spine; gave nux vomica, ergot, arsenic, and many other drugs with little or no effect.

In the catarrhal form I found the following prescription very good:—

℞ Quinine sulph..... 3 i.
 Aloes bark pulv..... 3 ij.
 Camph. pulv..... 3 i.
 Ammon. carb..... 3 ij.

M. ft. pil. xxxii.

S.—1 pill every two hours; good nursing, with milk and beef essence; diet must be rigidly kept up.

I have had my usual number of cases of tetanus, most of them being caused by nails in the feet. I find from Sept. 1, 1884, to date, I have had twenty cases. Eleven have died; nine have recovered. Have had a few cases of rabies in dogs, both mad and dumb. I have noticed in our newspaper that hog cholera has prevailed to some extent in the country parts of South Carolina, but was not called to see any cases.

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Blind staggers, I have learned from several gentlemen, has been very fatal in the counties near Charleston. This, I think, is due to turning the horses out all night and their grazing on the dewy grass early in the morning. I have not seen or heard of any contagious diseases in cattle.

A friend of mine on an island adjacent to Charleston has reported a great many of his cows dying from parturient apoplexy. Some, he says, have apparently been well in the morning and dead at night. The usual remedies have not time to act. He says he has not been turning them out at night, but been feeding them in stalls. I think he has had them too fat.

Respectfully submitted,

BENJ. MCINNES, JR., V.S.

PHYSIOLOGICAL PATHOLOGY.

UPON CYSTITIS AND NEPHRITIS PRODUCED IN A HEALTHY ANIMAL BY THE INTRODUCTION OF THE MICROCCOCUS URINÆ INTO THE URETHRA.

BY MESSRS. LEPINE AND G. ROUX.

Half a drop of pure culture of *micrococcus urinæ* was, by means of a flamed pipette, injected into the urethra of a guinea pig, and a ligature applied and left on the prepuce for several hours. In a few days the region became more or less swollen, some slight sloughing occurred, and the urine, which had become very ammoniacal, was found to contain many micrococci and granular casts. On post-mortem the bladder was found thickened, and its mucous membrane reddened, and if the animal had been killed, the kidneys were in a congested state, but, if he had been allowed to die, (death taking place in a few days,) these organs had become yellow.

In both cases, the examination of well-colored sections has shown *micrococci* in the epithelial cells; and a piece cut from the centre of the kidney, carefully obtained, and placed in sterilized urine, had given a pure culture of *micrococcus* in *urinæ*.

Several *healthy* (saines) females that were kept in the cage with the inoculated males, had also ammoniacal urine, containing

casts and micrococci; they also died after a few days with the same vesical and renal lesions.

In the dog, whose concentrated and acid urine seems, *a priori*, to be a very bad medium of culture, the introduction into the urethra of a few drops of pure culture of micrococci, followed by the ligature of the prepuce for a few hours, also gave rise to cystitis and nephritis.

In several male dogs inoculated in the same manner, and fed on meat, and in a number of females, which, after perineal section on the dogs, had been accidentally contaminated by the use of an uncleaned catheter, lesions less serious were found and death was less common, but still, however, with the presence of granular casts and *micrococci* in the urine, which always remained acid (or at least neutral). At the post-mortem of some of these the vesical mucous membrane was found to be red, and the kidneys, which were often pale in color, also contained *micrococci*.

These results seem to prove that when introduced into a healthy urinary apparatus the *micrococcus* urinæ will develop itself even when the urine is acid, and gives rise to vesical and renal lesions, likely to be followed by death—conditions which, doubtless, are not without similar results in human pathology. (*Academie des Sciences.*)

INFLUENCE OF ARTIFICIAL LIGHT UPON THE VEGETATIVE PROPERTIES OF THE BACILLUS ANTHRACIS.

By S. ARLOING.

The conclusions resulting from the experiments made are as follows: 1st. If vegetability means the power that belongs to the sporulated mycelium, or the free spores, to produce a new mycelium, it is observed that this power is rapidly lost in freshly sowed bouillons by the rays of a July sun. An exposure of two hours, with a heat of $+ 35^{\circ}$ and $+ 39^{\circ}$, produces this result. 2d. When the solar influence has lasted for two hours, the vegetability is only interrupted for a certain time. 3d. If we would discover which of the rays of solar light possess such an influence

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on the bacillus, it may easily be observed that it is the effect of the complete, entire body of light to which it is referable, and that it is also the more marked in proportion to the intensity of this light. 4th. These results are analogous to those which the author has already observed with artificial light.—*Academie des Sciences*.

UPON THE PASSAGE OF PATHOGENIC MICROBS FROM THE
MOTHER TO THE FŒTUS IN THE MILK.

BY M. KOUBASSOF.

Two series of experiments have been made. In the first the author has clearly observed the passage of the microbe of anthrax, hog cholera and tuberculosis in the milk, and the absence of any effect produced by the milk thus affected when given to the animals fed upon it. The conclusion he forms is that milk containing pathogenic microbes is not contagious; a condition which must thus be due to the integrity of the mucous membrane of their stomach and intestines.

In the second series the author brings to notice the evidences that there exists a direct communication between the blood vessels of the mother and those of the fœtus.

In conclusion, Mr. K. says:

1st. The bacilli of anthrax, hog cholera and tuberculosis, inoculated to a female recently delivered, pass in the milky secretion.

2d. When once in the milk, the bacilli remain in it until the end of lactation in the teats of the female.

3d. Fœtuses fed on milk containing bacilli of anthrax, hog cholera or tuberculosis, remain exempt from these diseases and live, even when their mothers die from it.

4th. The passage of the microbes of the mother to the fœtus depends probably on the existence of direct communication in the placenta between the blood vessels of the mother and those of the fœtus.—*Academie des Sciences*.

EXTRACTS FROM FOREIGN JOURNALS.

IODOFORM TREATMENT OF A CASE OF CANKER OF THE FOOT.

BY MR. GILLIBERT.

A gelding, eight years old, was affected with canker of the left fore foot, which, notwithstanding the regularity of the dressings and the use of the various modes of treatment recommended, resisted for three months; only a slight occasional improvement, followed by relapse, being obtained. Four months after the first attack the disease had made its appearance on both hind feet. The same daily attention was continued, but careful dressing brought on only temporary relief, and at the end of the fifth month the severe treatment of nitric acid and perchloride of iron failed to secure advantageous result. It was then that iodoform was for the first time used. The powder was laid over the entire diseased surface, and kept in place by a proper dressing. This was renewed every day for the first three days, and then every forty-eight hours.

At the second dressing the discharge had diminished, and the foot looked better. At the fourth, the wound was rosy, and surrounded by a thin, whitish band of new hoof. The suppuration was of a better nature. On the sixth day, small spots of adherent and hard hoof were found over the denuded sole. At the eighth dressing, everything was improved; and at the tenth the fore foot was cured.

Treatment with iodoform was then employed on one of the hind feet—the right one—the left being left alone as witness. The recovery of the right foot took place as rapidly as that of the fore foot. Treatment of the left foot, so far unsuccessful by the other classic medications, also secured recovery in eight days. Since that time no return of the disease has been observed.—*Recueil de Medecine Veterinaire.*

TREATMENT OF LOCKJAW WITH PHENIC ACID.

BY MR. POINOT.

Reports having been made of the advantage obtained with creosote in the treatment of lockjaw, in which the applications of

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the ointment of that preparation upon the masseter muscles, or over the entire spinal column, had been followed by relaxation of the trismus, of the dilatation of the nostrils, and of the corded condition of the flank, the author was brought to the trial of this medicine with satisfactory results.

First, two horses, previously treated by chloral hydrate without results, received a friction over the body of phenic acid with one-tenth solution, which lasted from seven to eight minutes. In these animals the frictions were renewed forty-eight hours afterwards, and were soon followed by the general effect of the absorption of the drug. The recovery became well established after the fourth application, and the animals were able to resume their work a month afterwards.

Another case is recorded of an animal suffering from traumatic lockjaw, following castration. At the onset of the disease he received chloral without benefit, and was placed under phenic acid treatment. The solution one-tenth, having been accompanied with sloughing of the skin in the first case, it was reduced to the strength of one-twentieth. This patient received five frictions, the first three daily; the others every other day. Recovery was rapid.—*Ibid.*

CÆSARIAN OPERATION IN THE BITCH.

By MR. V. PEUPION.

The author divided the operation into five steps, as follows:

1st. The animal lying on the proper side, (right or left), an incision eight centimeters long was made through the skin, from the external angle of the ilium forward and downward, toward the last rib. Then the aponeurosis and muscles were divided, and when the wound was bloodless the peritoneum was exposed, punctured with the bistoury and opened in the direction of the cutaneous opening.

2d. The abdominal walls being opened, the intestinal and uterine horn were exposed, and the opening of the foetal membranes sac was accomplished. Bringing the horn as near to the opening of the skin as possible, the various coats of the organ were succes-

sively divided to a sufficient extent to allow the escape of the foetus.

3d. This was done with the forceps, and was effected as carefully as possible, in order to avoid injury to the uterus.

4th. The organ was sewed up, by a simple interrupted suture, carefully put on; all the ends of which were gathered together and brought outside of the cutaneous division.

5th. A continued suture was employed to bring together the skin and muscles, and the wound was treated antiphlogistically.

After referring to a number of unsuccessful cases on record, the author describes one case in which all these steps were carefully followed, and which ended by recovery.—*Ibid.*

GOURMY DIATHESIS—ABSCESS OF THE STOMACH.

BY MR. SALORME.

This is an unusual complication of distemper, not mentioned in veterinary literature. The animal subject of the report had died with pleuro-pneumonia and gangrene of the right lung. Death would at any rate have taken place without these complications, on account of the trouble of the stomach, a condition which was discovered at the post mortem, when the organ was to be pulled out of the abdominal cavity. During life the animal had very large abscesses in the intermaxillary space; an abundant yellowish discharge from both nostrils; a few buttons of horse pox on the nose and internal face of the upper lip. The abscesses were opened with the actual cautery. Nothing important took place for a few days following after, except that the appetite had entirely disappeared. Notwithstanding the most active treatment, the animal died about four weeks after the first attack. The abscess was about the size of an apple, and contained some white creamy pus of good character. It was situated in the middle of the fleshy coat, and had an opening on the side of the mucous membrane. The inside of the stomach showed its surface in a healthy condition and covered on the left sac with a large mass of bots, some three hundred in number.—*Ibid.*

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FIBROUS MYOMA OF THE SMALL INTESTINE IN A MARE.

BY M. CADEAO.

The subject of this report was losing flesh for about three weeks, and was suffering with intermittent, slight chilly pains after each meal. She soon died, and the post-mortem revealed the following lesions: Rupture of the stomach, with a tumor of the size of a child's head, at about a yard and a half from the pylorus. This was irregularly globular, hard, of a gray whitish color and surrounded the intestine in a muff-like manner, being narrowed in its central diameter. This was the cause of the rupture of the stomach, it having interfered with the passage of the food. Examined microscopically, it proved to be a fibrous myoma, constituted in great part of fasciculi, parallel or intercrossed, and more or less undulated. Each fasciculus contained fusiform cells, with large nuclei irregularly scattered round. Some of those cells were in process of formation, and others were undergoing granulo-fatty degeneration.—*Ibid.*

REPORTS OF CASES.

ASCITES IN A HEN.

BY B. McINNES, JR., V.S.

Having a fine Leghorn hen about three years old, in seemingly good condition, and depositing eggs regularly, I noticed that she was getting very large in the abdomen and unable to fly up to roost. I thought she had a large tumor of some kind in her. I caught her one day when she seemed to be almost exhausted from the heat and the weight she was carrying, and to my surprise found she had dropsy. I do not think I can say ascites abdominalis, there being no diaphragm in the fowl, and the fluid evidently filled the whole cavity. I tapped the abdomen by making an incision about one inch long, when there must have not less than three pints of a water white fluid escaped from her. I put one stitch in the opening, and she seemed perfectly relieved, and what is more remarkable, kept on depositing eggs. About three

weeks after this I noticed she was large again and not able to walk very fast. I caught her, made another incision at the same point, and twenty-four ounces of water white fluid escaped. This relieved her again. She then stopped depositing eggs, but seems in perfect health, comb very red, and plumage in fine condition. About three week after the second tapping she filled again, and I again tapped her, and exactly twenty-four ounces of fluid escaped. It has been now five months since the third tapping, and the hen appears quite well. No constitutional treatment was given. The hen was fed on oats only.

The second and third time I tapped the hen I measured the fluid with a graduated glass.

SANITARY VETERINARY LEGISLATION.

RULES FOR THE GUIDANCE OF VETERINARIANS.

ILLINOIS LIVE-STOCK COMMISSION.

When an assistant veterinarian is notified of the existence of a supposed case of pleuro-pneumonia among cattle or glanders among horses, he shall make a thorough examination of the diseased animals, and if he is convinced that the case under consideration is a genuine case of one or the other of these diseases, he shall at once notify the owner in writing of his opinion regarding them, and shall warn the owner or owners under penalty of the law from moving to or from the infected premises any animals of the kind diseased. He shall then notify the State Veterinarian of his investigation and belief, and request his immediate presence at the infected point, and shall also report to the Commission all particulars in the case as to name of owner, locality, and supposed disease, together with the number of animals affected, but in no case are assistant veterinarians to order the slaughter of animals affected, unless expressly authorized by the Live-Stock Commission.

The compensation of assistant veterinarians is fixed at \$1 per hour for parts of a day, and not to exceed \$8 per day in addition to their necessary expenses in going from and to their place

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of business, and they are restrained from receiving any compensation from private individuals during the time actually employed in the service of the State. It is also made the duty of assistant veterinarians to at once notify the Live-Stock Commission should it come to their knowledge that cattle have come into this State from localities in other States against which the Governor has complained, giving all the facts obtainable in the case. The rules instruct the assistant veterinarian to enter any lane, dairy or cow shed, or other place or building wherein they have reasonable grounds for supposing that pleuro-pneumonia or glanders exists or has existed for sixty days prior to the time of the visit, or where the carcass of an animal so affected has been kept, or buried, or otherwise destroyed in violation of law, or where they have reason to believe any provisions of the law under which they are acting have been violated, and in case the owner refuses them entrance they are to procure a warrant for his arrest for violation of the law.

When any person desires to ship animals to a State which has proclaimed against this State, the State Veterinarian and assistant veterinarians when called upon are required to make examination of such animals, and, if found healthy and to conform with the provisions of the law in all respects, to furnish the owner with a health certificate, but for such service they are to be paid by the owner and receive the same compensation allowed by the State, together with their necessary expenses in performing the service, and in no case will the State be liable for such cost of service.

When the State Veterinarian makes an examination of the animals on any premises, and is convinced that either of the above-named diseases exists, he is required to serve a notice to that effect on the person in charge, and, if he deems necessary, upon the persons in charge of adjacent premises or farms, and shall at once notify the Commission, and when they are satisfied of the correctness of the report of the State Veterinarian, they will order the quarantine of the infected premises, and if necessary, the adjacent premises, farms and highways, and they will from time to time, as they see fit, by order extend, contract or otherwise alter the limits of a place or area infected. The Com-

mission will cause to be slaughtered all animals deceased with lung plague. All cattle having been in close contact with those infected with lung plague will be killed or placed in strict quarantine, as the Commission may direct, at the expense of the owner. They will also, as they may deem to be the most prudent, order either the slaughter or close quarantine of all animals suspected of infection with lung plague or being in a place infected.

The rules provide for the total destruction of the carcasses of diseased animals, including the hide, by fire or otherwise; but in cases where animals suspected of contagion are killed and are found to be healthy, the carcass may be sold under such regulations as the Commission may prescribe, and in case the amount received for the carcass exceeds the appraised value of the animal, the excess will be paid to the owner. The rules provide for slaughtering animals on the infected premises, and for disposing of the carcasses, when practicable, there. An appeal is given persons aggrieved from the decision of the State Veterinarian to the Commission, but pending the disposition of the appeal, the restrictions imposed shall stand in full force. The State and Assistant Veterinarians are required to make monthly reports to the Commission. They are also charged to use diligence in the case of circus troupes, bands of gypsies, and herds of horses in the hands of traders to detect cases of glanders, and applies the same rule as in other cases. They are charged to observe the greatest forbearance consistent with the public safety in dealing with persons so unfortunate as to possess diseased animals. The same document also contains important suggestions as to disinfection of premises, etc.—*National Live-Stock Journal*.

RULES AND REGULATIONS GOVERNING QUARANTINE AND THE ADMISSION OF CATTLE INTO WYOMING TERRITORY.

(Extract from Chapter 41, Laws of 1882.)

SECTION 2. The duties of said veterinarian shall be as follows
 * * * And to inspect under the regulations of this act all domestic animals that may arrive at any railroad station in this Territory, * * * and it shall be the duty of the owner, or in his

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absence, of the person in charge of such animals so arriving, to notify the Territorial Veterinarian without delay, and not to allow such animals or any of them to leave the place of arrival until they shall have been examined by the Veterinarian and his certificate obtained that all are free from disease. * * * Any person failing to comply with this provision shall be deemed guilty of misdemeanor, and, upon conviction, shall be fined not less than fifty nor more than five hundred dollars for each offence.

SEC. 9. The above regulations shall apply as well to animals in transit through the Territory * * * and the Territorial Veterinarian or his duly authorized agent shall have full authority to examine, whether in car, or yard, or stables, all animals passing through the Territory or any part of it, and on detection or suspicion of disease to take possession of and treat and dispose of said animals in the same manner as is prescribed for animals resident in the Territory.

WHEREAS, the Governor of Wyoming did by proclamation on the 7th day of August, 1885, on account of the existence of contagious diseases among the cattle, schedule certain localities, and forbid the importation of cattle therefrom, except only on the conditions and under the restrictions following:

1st. All cattle from localities scheduled by Governor's proclamation will be quarantined on arrival in Wyoming.

2d. Cattle from localities not named in Governor's proclamation must present proof: That they have been kept on one farm for the last four months; that no animals have been added to the herd during that period, and that no contagious disease has existed in the herd or vicinity.

3rd. Affidavits of owners will be accepted as proof when the affiant's respectability is certified by his county clerk, or president of the bank in which they do business.

4th. Dealers' cattle, gathered over a wide extent of country, will be quarantined on arrival here—(unless kept together four months previous to shipment).

5th. Veterinarians' certificates of health are of no value, unless accompanied with proof that the herd have been isolated the previous four months.

6th. All cattle from the Western States, unable to furnish satisfactory proof, will be furnished corralls and sheds, and will be held in quarantine until by lapse of time they are proved free from disease—not more than ninety days. Cattle held in quarantine are at owners' risk and expense, and they will be allowed to buy feed in the market at the lowest rates.

7th. All cattle from the Southern States must furnish proof that they have been north of the "Fever line" ninety days, or they will be quarantined until by lapse of time they are deemed safe to mingle with the native cattle—at least sixty days.

8th. All cattle coming into or passing through this Territory must unload at Cheyenne for inspection and examination of proof, and all such cattle are subject to the sanitary laws in force here.

9th. All cattle arriving here will be inspected free of charge to owner.

JAS. D. HOPKINS, Territorial Veterinarian.

Cheyenne, Wyo., August 6th, 1885.

A PLEURO-PNEUMONIA PROCLAMATION.

The Illinois Live Stock Commission is in receipt of a proclamation of quarantine issued by the Governor of Wyoming, Aug. 7, wherein he schedules against the following localities where it is represented to him pleuro-pneumonia exists in an epidemic form, and from which localities he forbids the shipment of cattle into or through Wyoming, except under restrictions set forth:

New York—The counties of Putnam, Westchester, New York, Kings, Richmond and Queens.

Pennsylvania—The counties of Bucks, Montgomery, Philadelphia, Delaware, Chester and Lancaster.

New Jersey—The counties of Bergen, Hudson, Morris, Essex, Union, Somerset, Hunterdon, Middlesex, Mercer, Monmouth, Ocean, Burlington, Camden, Gloucester, Passaic and Atlantic.

Delaware—The county of Newcastle.

Maryland—The counties of Cecil, Harford, Baltimore, Howard and Carroll.

Ohio—The counties of Miami and Montgomery.

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Illinois—The counties of Cass, Kane, Du Page, Peori, Whiteside, Morgan and Schuyler.

Osage county, Missouri; Harrison county, Kentucky; Travis county, Texas; and the District of Columbia are also included.

The proclamation also recites that splenic or Texas fever exists in certain localities in Texas, and forbids the transportation of cattle into or through Wyoming. The proclamation provides that all animals brought into that Territory from points lying east of the ninth degree of longitude west shall be brought by rail and shall be unloaded at the Territorial quarantine station and there be subjected to a rigid inspection by the Territorial Veterinary Surgeon.

It is a pretty clearly demonstrated fact that at present there is no pleuro-pneumonia existing in an epidemic form in Illinois, though it is said that it is not certainly known that there is not one or two localities where there is danger to be apprehended. Some of the localities mentioned in this State in this proclamation, however, are unjustly discriminated against. The Illinois Live Stock Commission will hold a meeting at an early date and take action on the quarantine restrictions to be inaugurated in this State under the new law.

Gov. Oglesby has turned over to the Auditor for payment claims for animals slaughtered under the old law on account of being diseased or infected with pleuro-pneumonia. The claims aggregate about \$7,000, being the amount of the appraised value of the animals; but since the new law provides that owners of animals killed by the State Veterinarian cannot receive in excess of \$75 per head, the Auditor cannot pay the full amount, and the amount will be reduced fully one-half.—*Western Rural*.

CORRESPONDENCE.

PROLIFIC COW.

DEAR SIR.—A cow belonging to Leander Sherman, Burrillville, R. I., four years old, gave birth, on September 5, to three calves. All are doing well up to date. The cow is a thoroughbred Ayrshire and the bull the same.

Yours in haste, C. H. PEABODY.

LIST OF THE VETERINARY SURGEONS IN THE UNITED STATES ARMY.

Name.	Graduate of	Regiment.	Address.
R. B. Corcoran....	Not Graduate.....	1st Cavalry.....	Fort Custer, Mont.
E. R. Forbes.....	Ontario College.....	2d "	Fort Walla Walla, W. T.
W. J. Waugh.....	Ontario College.....	3d "	Fort Davis, Texas.
B. D. Pierce.....	Montreal, M.R.C.V.S.....	5th "	Fort Riley, Kans.
J. A. Waugh.....	Ontario College.....	6th "	Fort Bayard, N. Mex.
W. A. Going.....	M.R.C.V.S.....	7th "	Fort Meade, Dak.
M. J. Treacy.....	M.R.C.V.S	7th "	Fort Meade, Dak.
A. R. Balkam....	Columbia V. C.....	8th "	San Antonio, Texas.
A. G. Vogt.....	American V. C.....	8th "	San Antonio, Texas.
John Tempamy....	Not Graduate.....	9th "	Fort McKinney, Wyo.
Alex. McDonald.....	Ontario.....	9th "	Fort McKinney, Wyo.
S. W. Service	Not Graduate.....	10th "	Whipple Barracks, Prescott, Ariz.
A. E. Buzzard.....	M.R.C.V.S	10th "	Whipple Barracks, Prescott, Ariz.

SOCIETY MEETINGS.

UNITED STATES VETERINARY MEDICAL ASSOCIATION.

The regular annual meeting of this Association was held in the lecture room of the American Veterinary College, Tuesday, September 15th, at noon.

There was no action taken by the Comitia Minora further than to recommend to the general meeting several applicants for membership.

The minutes of the Comitia Minora and of last general meeting were read and approved. Upon roll call nearly fifty members responded to their names.

The following delegates from the Pennsylvania State Veterinary Medical Association were present: Drs. W. S. Kooker, Thos. B. Rayner and J. B. Rayner. From the Massachusetts Veterinary Association, Drs. Bunker and Howard.

Communications were also received from other State societies.

The following gentlemen were then admitted as members: Drs. J. A. McLaughlin, A. L. Brown, S. L. Richards, H. T. Yokura, J. P. Wilson, W. G. Hollingworth, Wm. Diamond, J. W. Scheibler, Wm. R. Mitchell, W. H. Prockett, T. W. Spranklin, M. R. Trumbower and H. F. James.

There were numerous applications for membership presented, to be voted on at the March meeting of the Association.

The election of officers for the ensuing year resulted as follows: President, L. McLean, M.R., C.V.S.; Vice-President, J. B. Cosgrove, D.V.S.; Secretary, Ch. B. Michener, D.V.S.; Treasurer, J. L. Robertson, M.D., V.S.; Board of Censors, Drs. D. J. Dixon, A. Lockhart, J. C. Corlies, W. J. Crowley, W. B. E. Miller, S. S. Field and F. H. Osgood.

Appropriate remarks followed by the retiring and newly elected presidents, after which a short adjournment was taken.

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A large amount of unfinished business was left over for the spring meeting.

The Treasurer's report showed the finances of the Association to be in a flourishing condition. A unanimous vote of thanks was tendered to the retiring Treasurer, who for so many years has faithfully discharged the duties of that office.

Several papers were presented through the Committee on Diseases which were, by vote, ordered to be published in the *AMERICAN VETERINARY REVIEW* and *Journal of Comparative Medicine*.

A communication was then read from Dr. Hodgson of Brooklyn, asking inspection of an operating table lately devised by him.

Dr. Miller then presented a small instrument for giving minute doses of medicine by the mouth.

The Association was then favored by Dr. F. S. Billings, who presented a few remarks on the pathological lesions and microscopic changes of the lungs in the various forms of pneumonia. The Doctor took advantage of the subject to exhibit a number of specimens with the microscope, among which was that of the lung of a cow destroyed for contagious pleuro-pneumonia, which under the lense, however, appeared to be of a different nature. This gave rise to an interesting discussion between Drs. Billings, L. McLean and Liautard.

It was moved that a committee of three be appointed to petition the proper authorities, and to secure if possible, more recognition of the services of American veterinarians.

The editor of the *AMERICAN VETERINARY REVIEW* supplemented the prize of fifty dollars now offered by the Association for the best paper presented, with the generous offer of a gold medal valued at fifty dollars.

The Association adjourned after listening to the reading of a very laughable advertisement presented by Prof. Huidekoper.

C. B. MICHENER, *Secretary*.

NEW YORK STATE VETERINARY SOCIETY.

The regular monthly meeting of the New York State Veterinary Society was held on Tuesday, September 8, 1885, at the American Veterinary College, New York. Dr. S. Field in the chair

Members present were Drs. Coates, C. C. Cattnach, Field, Dimond, Denslow, Pendry, Kay, R. Ogle, Faust and Jacobus.

Minutes of last meeting were read, and on motion adopted.

On the reading of papers for this meeting there was some discussion, resulting in a motion being passed requesting Dr. Kay to read his paper at the next meeting, so that it could then be discussed fully. And also, that the Secretary ask Dr. Cuff to favor the Society with his promised paper at its next meeting.

Prof. F. S. Billings was proposed for membership by Dr. R. A. McLean. The name of J. Blake White, M.D., was also proposed and referred, with the former, to the Board of Censors.

The application for membership by Dr. Lowe was brought forward, when it was moved, that he being a non-resident of the State, and having lately been elected Secretary of the New Jersey State Veterinary Society, the matter of his application be dropped. The motion was passed and the meeting adjourned.

W. H. PENDRY, *Secretary*.

PENNSYLVANIA STATE VETERINARY MEDICAL ASSOCIATION.

The semi-annual meeting of the Pennsylvania State Veterinary Medical Association was held at Doylestown on September 8, 1885. President Sallade called the meeting to order at 10:45 a.m.

On roll call Drs. Sallade, Fly, Zuill, Jas. B. Rayner, John B. Raynor, Keil, Thos. B. Rayner, Minster, Glass, Hoskins, George B. Rayner, Hart, Schaufler, Hooker and Lovette responded.

The minutes of the March meeting were read and after two corrections adopted.

Applications of the following for membership were then received: Drs. N. Rucktenwald, Pittsburg; H. T. George, Greencastle, and Isaiah Michener, J. Curtis Michener and Jonathan Price, and W. U. Custer of Reading. A recess being given the Board of Trustees acted favorably on all the applicants.

On reconvening the report was received and the above gentlemen elected to membership.

Dr. Hoskins then called up his motion of the March meeting, that the code of ethics then adopted be placed as an amendment to the By-Laws, which, after reading the code, was passed.

Dr. Zuill then reported the completion of the committee's work on securing certificates and seal, and Dr. Minster the work of the Committee on Reception at Doylestown.

Reading of papers being in order, Dr. P. M. Minster offered a short paper on "Contraction of the Foot," completing his remarks by advocating as a medium for overcoming the same, the Vandegrift shoe.

Dr. Thos. B. Rayner followed with an article on "Tetanus," but offered no special treatment.

In the discussion that followed both articles brought forth much difference of opinion, the Vandegrift shoe receiving little support save from the essayist.

A committee of three was appointed to supervise the printing of the Constitution and By-Laws.

At this point Dr. Hoskins made a few remarks touching upon the entrance of Dr. Isaiah Michener as a member, and proposed as a token of appreciation of this honor and his faithful and venerable career as a veterinary practitioner, that he not only be admitted as a member, but that he be placed on the roll of honorary membership and be exempt from all fees and dues, which was ably seconded by Dr. Zuill and others, and on motion unanimously adopted.

Dr. Hooker then referred to the death of one of our members, Dr. John Berry of Philadelphia, and moved that the President appoint a committee to take suitable action upon the same.

The name of Dr. R. P. Huidekoper was presented, as well as Dr. Gottlieb Myers of Allagheny, Pa.

Drs. McCoart, Hart, Schaufler, Goentner, Kerlor and Zuill were appointed essayists for the next meeting.

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At the suggestion of Dr. Hoskins the President appointed Drs. Jas. B. Rayner, Thos. B. Rayner and W. P. Hooker delegates to the United States Veterinarian Medical Association, meeting in New York on September 15th, and the Secretary was directed to give notice of the same.

Drs. Glass and Hart were appointed a Committee of Reception and arrangements for the Philadelphia meeting, after which the meeting adjourned.

W. HORACE HOSKINS.

NEWS AND SUNDRIES.

SKILLED VETERINARIANS.—President Willits, in addressing the Veterinary Department of the Agricultural College of Michigan, said: "This is now of prime importance in consequence of the large interests engaged in stock raising, and the prevalence of communicable diseases among animals. With eighteen States at this hour quarantined against the stock of other States in consequence of these diseases, it is important that we should have men educated specially in veterinary science; that we have in considerable numbers persons skilled in the diseases of domestic animals, and that we no longer depend upon the limited acquirements of the old-fashioned 'horse doctor.' The last Legislature, with commendable liberality, has afforded the college the means to erect a building especially devoted to that science, with a museum and lecture-room, with operating rooms and dissecting tables, with manikins and skeletons and all the apparatus needed to illustrate the subject as fully as the best medical colleges illustrate the subject of the diseases of the human body. All the students in the agricultural course receive instruction in this science, and the interest which they have exhibited in the lectures fully indicates their appreciation of its importance."—*Prairie Farmer*.

OHIO STATE UNIVERSITY VETERINARY CHAIR.—At their last meeting the trustees of the Ohio State University decided upon the establishment of a Chair of Veterinary Science. The salary of the professorship is fixed at \$1,000 per year. The position is to be tendered to Prof. H. J. Detmers, of Champaign,

Ills. The course of veterinary science will cover at least three, and possible four years, and be the most complete that there is in any institution on this continent (?), except one in Montreal. —*Ohio Journal*.

A SUBSTITUTE FOR CARBOLIC ACID.—The extraordinary power of naphthol as an antiseptic and disinfectant has been known for a long time; but its disagreeable smell, and the difficulty of preparing it in a pure state, with the occasional toxic action of the crude naphthol, have hitherto prevented its general adoption as a remedial and antiseptic agent. Justus Wolff, a chemist interested in coal-tar products, has recently succeeded in producing it in a pure and odorless state in well-defined crystals, and he claims its antiseptic action is much greater than that of carbolic acid. Recent research has demonstrated that the toxic effects of crude naphthol were due to the impurities it contained. Dr. Shoemaker, of Philadelphia, in a paper read before the Philadelphia County Medical Society, on the "Medical Use and Value of Naphthol," conclusively proved the non-poisonous character of the purified or odorless naphthol by taking large doses internally. It has no corrosive action on the skin, and will not injure textile fabrics. As a remedial agent it is said to act with greater efficiency than carbolic acid, and if so, the fact of its being absolutely odorless will make it a desirable substitute for the latter. It is expected that it will shortly be manufactured in large quantities and introduced as a substitute for carbolic acid.—*Medical Record*.

THE WAY TO PREPARE SURGICAL SPONGES.—The following is Mr. Lawson Tait's method of preparing the sponges, and but one person is trusted to do this: New sponges are first put into a large quantity of water, with sufficient muriatic acid to make the water taste disagreeably acid. They remain in this mixture until all effervescence has ceased and all the chalk is removed. For this purpose it may be necessary to renew the acid several times. The sponges are afterward carefully and thoroughly washed, to make them as clean as possible and free from every rough particle. After being used at an operation, they are first washed free from

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blood, and then put in a deep jar and covered with soda and water (one pound of soda to twelve sponges). They are left in this about twenty-four hours (or longer if the sponges are very dirty), and then they are washed perfectly free from every trace of soda. This takes several hours' hard work, using hot water, squeezing the sponges in and out of the water, and changing the water constantly. Leaving them to soak for a few hours in very hot water greatly assists in the cleansing. When quite clean they are put in a jar of fresh water containing about one per cent. of carbolic acid, and after being in this for twenty-four hours they are squeezed dry and tied up in a white cotton bag, in which they are hung up in some dry place.—*Medical Record*.

EXCHANGES, ETC., RECEIVED.

FOREIGN.—*Veterinarian*, *Veterinary Journal*, *Annals de Medecine Veterinaire*, *Clinica Veterinaria*, *Recueil de Medecine Veterinaire*, *Presse Veterinaire*, *Echo Veterinaire*, *Gazette Medicale*, *Revue d'Hygiene*, *Revue fur Thierheilkunde und Thierzucht*, *Journal de Zootechnie*.

HOME.—*American Farmer*, *Country Gentlemen*, *Prairie Farmer*, *Medical Record*, *Medical Herald*, *Farmers' Review*, *Breeders' Gazette*, *College and Clinical Record*, *American Agriculturist*, *Maine Farmer*, *Science*, *Home and Farm*, *Turf*, *Field and Farm*, *Spirit of the Times*, *National Live Stock Journal*, *Home Farm*, *Practical Farmer*, *Druggists' Circular*, *Ohio Farmer*, *Iowa Farmer*, etc.

CATALOGUES.—*Schweizer Archivs fur Thierheilkunde*, *Bericht deber das Vetennarrinen*, *Catalogue Polyclinic School*, *Catalogue Post Graduate School of Medicine*, *Montreal Veterinary College*.

JOURNALS.—*American Medical Digest*, *Cooper's Medical Announcement*, *Wallace's Monthly*, *Farm and Garden*, *Home Journal*, *Eastern Medical Journal*, *Western Reporter*, *Dairy World*, *American Sheep Breeders' Gazette*, *Philadelphia Times*, *Northwestern Live Stock Journal*, etc.

BOOKS AND PAMPHLETS.—*Bulletin de l'Academie de Medecine*, *Répertoire de Medecine Dosimétrique*, *Report sur l'Etat Sanitaire des Animaux Domestiques au Brabant*, *Dancing Mania of the Middle Ages*, *Wyoming State Growers' Association Reports*, *Laws of Nebraska*, *Laws of Tennessee*.

CORRESPONDENCE.—J. D. Hopkins, D.V.S.; J. Meyer, Jr., M.D., D.V.S.; B. McInnes, Jr., M.R.C.V.S.; C. H. Peabody, D.V.S.; H. Hoskins, D.V.S.; W. Pendry, D.V.S.; D. Dixon, D.V.S.; C. B. Michener, D.V.S.; R. F. Burleigh, D.V.S.; W. Critcherson, D.V.S.; D. L. Phares, A.M., M.D.

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School of Veterinary Medicine.

Session 1885,-86.

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